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**Terwee et al.**

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(54) **METHOD OF IMPLANTING AN  
INTRAOCULAR LENS**

(75) Inventors: **Thomas Henricus Marie Terwee**,  
Roden (NL); **Hendrick Albert Weeber**,  
Groningen (NL); **Patricia Ann Piers**,  
Groningen (NL)

(73) Assignee: **AMO Groningen B.V.**, Groningen (NL)

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4,950,289	A	8/1990	Krasner	
5,224,957	A	7/1993	Gasser et al.	
5,278,258	A	1/1994	Gerace et al.	
5,391,590	A	2/1995	Gerace et al.	
5,476,514	A	12/1995	Cumming	
5,728,155	A *	3/1998	Anello et al.	623/6.47
6,051,024	A *	4/2000	Cumming	623/6.44
6,164,282	A	12/2000	Gwon et al.	
6,176,878	B1	1/2001	Gwon et al.	
6,197,059	B1	3/2001	Cumming	
6,361,561	B1 *	3/2002	Huo et al.	623/6.56
6,387,126	B1	5/2002	Cumming	
6,638,306	B2	10/2003	Cumming	
2004/0243233	A1	12/2004	Phillips	

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(52) **U.S. Cl.**  
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See application file for complete search history.

(56) **References Cited**

#### **U.S. PATENT DOCUMENTS**

4,542,542	A	9/1985	Wright
4,573,998	A	3/1986	Mazzocco
4,608,050	A	8/1986	Wright et al.
4,685,921	A	8/1987	Peyman
4,836,202	A *	6/1989	Krasner
4,919,151	A	4/1990	Grubbs et al.

#### **FOREIGN PATENT DOCUMENTS**

EP	0414219	2/1991
WO	WO 9947185	9/1999
WO	WO 0022459	4/2000
WO	WO 0022460	4/2000
WO	WO 0044379	8/2000

#### **OTHER PUBLICATIONS**

Nishi et al. "Controlling the Capsular Shape in Lens Refilling", Arch  
Ophthalmol. 115:507-510 (1997).

Hettlich et al. "Light-induced endocapsular polymerization of inject-  
able lens refilling materials" German J. Ophthalmol., 1:346-349  
(1992).

O'Donnell, Jr., et al. "Intraoperative Autorefractive: Avoiding  
Intraocular Lens Power Surprises", J. Cataract Refract. Surg.,  
15:597-598 (1989).

\* cited by examiner

*Primary Examiner* — David Isabella

*Assistant Examiner* — Joshua Levine

(74) *Attorney, Agent, or Firm* — AMO Groningen B.V.

(57) **ABSTRACT**

A method for implanting an intraocular lens into the eye of a  
subject includes placing the intraocular lens into the eye of a  
subject and administering a drug in an amount sufficient to  
maintain an accommodative state of the eye. The method  
further includes permitting at least a portion of the intraocular  
lens to become coupled to at least a portion of the eye while  
maintaining the eye in the accommodative state. In certain  
embodiments, the method may include forming an intraocu-  
lar lens while maintaining an accommodative state of the eye.  
In such embodiments, the method may exclude permitting at  
least a portion of the intraocular lens to become coupled to at  
least a portion of the capsular bag.

**6 Claims, No Drawings**